

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-3. (Canceled)

4. (Currently Amended) An optical signal transmission device ~~composed by~~ comprising: ~~laminating~~
_____ a plurality of ~~the~~ optical signal transmission ~~substrates~~ substrates, each
including as stated in claim 1 an optical signal transmission area where at least one of a light
emitting element for sending the optical signal to other optical signal transmission substrates
or a light receiving element for receiving the optical signal from other optical signal
transmission substrates is located so as to be capable of sending or receiving the optical signal
in a direction substantially perpendicular to a surface of the substrate;
_____ the plurality of optical signal transmission substrates being laminated in such a
manner that the optical signal transmission areas of the respective substrates overlap one
another, an adhesive layer formed between the optical signal transmission substrates, the
adhesive layer being composed of an adhesive agent and electrodes for electrically connecting
the electrodes of both substrates, the electrodes of the adhesive layer being in contact with
respective electrodes of the substrates;

wherein the light receiving element is located in any one of the optical signal transmission substrates so as to be opposed to the light emitting element provided in any one of the other optical signal transmission substrates.

5. (Original) An optical signal transmission device according to claim 4, wherein the optical signal transmission substrate held between the optical signal transmission substrate provided with the light emitting element and the optical signal transmission substrate provided with the light receiving element comprises a transmittable window

exhibiting light transmittability at the position where the optical signal to be transmitted between the light emitting element and the light receiving element passes through.

6. (Original) An optical transmission device according to claim 4, wherein plural sets of the light emitting element and the light receiving element for transmitting the optical signal are located along the optical axis of one optical signal.

7. (Canceled)

8. (Currently Amended) An optical signal transmission device of claim 4
~~composed by further comprising: laminating~~

~~_____ a plurality of the optical signal transmission substrates as stated in claim 2~~

~~_____ wherein the optical signal transmission substrate is used as it is held between
the other optical signal transmission substrates;~~

~~_____ wherein the optical signal transmission area comprises a transmittable window
exhibiting light transmittability at the position where the optical signal transmitted between
the other optical signal transmission substrates passes through; and in such a manner that the
optical signal transmission areas of the respective substrates overlap one another, wherein the
light receiving element is located in any one of the optical signal transmission substrates so as
to be opposed to the light emitting element provided in any one of the other optical signal
transmission substrates.~~

9. (Currently Amended) An optical signal transmission device of claim 4
~~composed by further comprising: laminating~~

~~_____ a plurality of the optical signal transmission substrates as stated in claim 2~~
~~electrodes at least at a pair of edges of each of the optical signal transmission substrates~~

~~_____ wherein the optical signal transmission substrate is used as it is held between
the other optical signal transmission substrates;~~

wherein the optical signal transmission area comprises a transmittable window exhibiting light transmittability at the position where the optical signal transmitted between the other optical signal transmission substrates passes through; and in such a manner that the optical signal transmission areas of the respective substrates overlap one another, wherein the light receiving element is located in any one of the optical signal transmission substrates so as to be opposed to the light emitting element provided in any one of the other optical signal transmission substrates.

10. (New) An optical signal transmission device according to claim 4, the optical signal transmission area having a layer with a transparent material.

11. (New) An optical signal transmission device according to claim 4, further comprising:

a plurality of optical signal transmission areas, wherein clads are provided at boundaries of the plurality of optical signal transmission areas.

12. (New) An optical signal transmission device according to claim 4, the optical signal transmission area being divided into lattice sections and the light emitting element on the light receiving element being located according to at least one of the lattice sections.